

CLAIMS

1. An integrated automatic system for remote monitoring and management of vehicle access and parking in urban areas on a selective basis characterised in that it comprises:
 - a mobile recognition device (17), in which a user code is memorised, and which can be positioned inside a vehicle (18);
 - a detection sensor (11) installed close to a respective parking space (19);
 - a network connecting the detection sensors (11) to a fixed data collection station (20);
 - a control centre (21), connected to the second network, for decoding and reprocessing the data.
2. A system according to claim 1, characterised in that it also comprises a second network connecting a plurality of fixed stations (20) designed to collect data from respective areas with parking spaces (19).
3. A system according to any of the foregoing claims, characterised in that the mobile recognition device (17) consists of a mobile telephone or a miniaturised device, which can be positioned inside the vehicle (18), equipped with a memory containing the user identification code.
4. A system according to claim 3, characterised in that the code is transmitted automatically or manually by radio-frequency to the detection sensors (11).
5. A system according to any of the foregoing claims, characterised in that each detection sensor (11) is located inside an external unit (10) positioned close to a respective parking area.

6. A system according to claim 5, characterised in that each external unit (10) comprises:
- luminous indicators (12) which confirm the detection of an authorised or not authorised vehicle (18);
 - 5 - an interface (15), designed to communicate with the user,
 - means (16) for issuing receipts or printed messages of use to the authorised user.
- 10 7. A system according to claim 5 or 6, characterised in that each external unit (10) presents a buzzer (13) which is activated in the event of detection of a vehicle (18) parked without authorisation.
- 15 8. A system according to any of the foregoing claims, characterised in that the mobile recognition device (17) comprises a pair of displays, a pair of parking start and end pushbuttons, an active RFID tag and, preferably, a buzzer and a two-colour indicator.
- 20 9. A procedure for the management of an integrated automatic system, for remote monitoring and management of vehicle access and parking in urban areas on a selective basis, which foresees:
- the detection of the presence of a vehicle (18) in a specific respective parking space (19);
 - the recognition of the vehicle (18) as authorised or not authorised to use the space (19);
 - 25 - the emission of a visual and/or acoustic signal confirming the occupation of the space (19);
 - the detection of the parking time of the vehicle (18) in the parking space (19);
 - 30 - the transmission of the occupation of the parking space (19) and of the data regarding the recognised

or not recognised vehicle (18) to one or more area controller devices (20);

- 5 - the transmission of the data collected by the one or more area controller devices (20) to a central processing unit (21) designed to store the data regarding recognised vehicles and to immediately report any unauthorised occupation by vehicles (18) without authorisation;
- 10 - the calculation, by the central unit (21), of the fee in relation to the parking time;
- if required, the transmission of the data relative to the fee to a bank authorised for payment with the consent of the user.